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ABSTRACT

A number of studies have yielded contradictory findings about the relationship between teenage drivers' accident records and their completion of driver education classes. A sample of 75 senior students (37 male and 38 female) who had taken a driver education course was administered an 11-item questionnaire. The results of the study showed 18-year-old male students and students who received A's in the driver education course to have the most freedom in the use of an automobile and also to have the greatest number of traffic violations, accidents, suspensions, and incidences of drinking and driving. The results suggest that behind-the-wheel grades do not portend a good driving record. The A students' poor driving record can probably be traced to the freedom in the use of the car. Suggestions for improving teenager driver behavior and the immature attitudes that lead to reckless and chance-taking driving include having fire department rescue paramedics demonstrate, with film and photographs, the consequences of traffic accidents. Other remedies include issuing young and new drivers a probationary license, the enforcement of seat belt use, and the legislation of stricter drunk driving laws with compensatory liability responsibility that includes parents as well as students. (MLF)

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HIGH SCHOOL STUDENTS WITH HIGHEST DRIVING GRADES HAVE LEAST DRIVING RECORD

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By

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The increasing involvement of teenage drivers in automobile accidents has become a crucial problem. Although less than 8 percent of the licensed drivers in the United States are teenagers, 17 percent of all automobile accidents involve a teenage driver. Most of the accidents are the result of excessive speed and reckless driving. In many cases they are caused by not knowing the practical safety rules acquired by years of driving experience. The use of drugs and alcohol has significantly contributed to the disproportion rate of automobile accidents among teenagers. In 1980, alcohol was found in the blood of 58 percent of teenage drivers killed in automobile accidents. Forty-three percent were declared legally intoxicated by certified levels of alcohol in their blood (Bell 1982).

Questions have been raised as to the efficacy of high school driver education programs. Several state legislatures are contemplating the discontinuation of driver education. Unfortunately there are few research studies to support or negate such actions. Harrington (1971) found that students with Behind-The-Wheel (BTW) training had a lower accident record in the first years of driving than those without BTW. But it was not in subsequent years. Block's (1969) study showed that teenage drivers who had a driver education course had significantly more knowledge about the safe operation of an automobile than the control group.

Many insurance companies offer substantial premium reductions for

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teenage drivers who pass an approved driver education course. Allstate Insurance (1967) found a negative correlation between school grades and the amount of driving of students. Poorer students were more likely to have more driving experience, possess a driver's license and own their own cars. Kraus, et.al. (1970) compared the academic achievement of 205 teenage drivers who had auto accidents with those who had no accidents. He found 30 of the accident drivers had failed one or more grades as compared to only 17 of the non-accident drivers.

Traffic violations by teenage drivers increase the probability of accidents. Pelz and Shuman (1971), Goldstein (1972), Carlson (1968) and Berzina (1969) in similar but separate investigations found contradicting results. Several of the studies showed positive correlation between accident and traffic violation rates. Others found that young teenage drivers with no violations had a higher percentage of accidents than older drivers with no violations. Age, maturity and experience appeared to be significant determinants in the number of accidents. On the other hand, O'Farrell (1981) believes that the effectiveness of driver education cannot be judged by accident statistics only. Based on Illinois statistics, he rationalized that teenage drivers were not really a significant percentage of the driving population. And young drivers are almost an inconsequential factor in the accident rate of Chicago. He concluded "these data appear to indicate that driver education is an effective program."

A California study of the driving records of 7500 drivers found the under 21 age groups had significantly higher violation rates than the 26-60 age driver group for speeding and equipment and sign violations. Females in both age groups had better driving records than males (Harrington and

McBride, 1970).

Drunk driving and traffic violations are particularly high for drivers under age. An Illinois study by Kowalski, Rose and Fiores (1967) found one-third of the fatalities of persons age 15-20 had measurable blood alcohol. Thirty-three percent were the drivers of the involved automobiles, 38 percent were passengers, 29 percent were pedestrians. The teenage drivers with measurable blood alcohol, 57 percent had 0.10 percent or higher (legally drunk).

A study by Beamish and Malfetti (1962) compared the personality characteristics of young males (ages 16-19 years) traffic violators and non-traffic violators. They characterized the violators as being: 1) rebellious and selfish, 2) hypersensitive with low self esteem and confidence, 3) immature, 4) more anti-social, and 5) less responsible for their actions. When the factors of age, maturity, and drinking are taken into consideration, it is difficult to determine the overall effect of driver education on the driving performance of teenager drivers. Additional research is needed. As the result of the lack of such research, the present investigation was initiated to determine the correlation between behind-the-wheel grades and the driving performance record of teenage drivers.

METHODS OF DATA COLLECTION

A sample of 75 students were selected from a population that had taken a driver education course at a suburban high school southwest of Chicago. The sample included 37 male and 38 female senior students. The students were administered an eleven-item questionnaire related to: 1) car ownership, 2) length of possession of driver's license, 3) use of car, 4) driving performance and record, and 5) behind-the-wheel grade.

RESULTS

The findings showed that 63% of the 17 year olds (59% of the sample) and 100% of the 18 years olds (41% of the sample) had a driver's license for more than one year. The data also showed that almost all (85%) the students, whether they were seventeen or eighteen, male or female, or A, B, C students, either owned their own car or had extensive use of the family cars. Thirty-seven percent of the seventeen year olds owned their own cars and 41 percent had been given unlimited freedom to drive the family car. Of the eighteen year olds, 40 percent owned their own car and 33 percent had complete freedom to drive the family car. Seventy-eight percent of males and 77% of females owned or had unlimited use of a car.

Of the 15% that received a grade of A for behind-the-wheel driving, 91% owned or had the use of a car. Eighty-two percent of the B students (52%) owned or borrowed a car. C students (29%) also had unlimited use of an automobile, while none of D students (3%) had the use of an automobile.

Table I depicts data on the number of violations, accidents, license suspensions and revocations, and incidents of drinking and driving.

TABLE I

TRAFFIC VIOLATIONS, ACCIDENTS, LICENSE SUSPENSION AND DRINKING

	AGE				GENDER				B.T.W. GRADE							
	N=59 17		N=15 18		N=37 MALE		N=38 FEMALE		N=11 A		N=39 B		N=22 C		N=2 D	
	YES	NO	YES	NO	YES	NO	YES	NO	YES	NO	YES	NO	YES	NO	YES	NO
1. While driving an automobile, have you ever been stopped by the police for a traffic violation?	30	70	53	47	58	42	13	87	64	36	28	72	36	64	0	100
2. Have you ever received a ticket for any violation other than a parking ticket?	25	75	53	47	50	50	13	87	64	36	28	72	23	77	0	100
3. Have you ever been involved in any type of accident while driving an automobile?	24	76	53	47	36	64	24	76	36	64	26	74	36	64	0	100
4. If you answered yes to question 3, was the accident your fault?	12	17	20	40	17	28	10	16	18	27	5	28	27	9	0	0
5. Have you ever driven an automobile after consuming alcoholic beverage?	58	42	67	33	72	28	47	53	64	36	59	41	59	41	50	50
6. Has your license ever been suspended or revoked for any reason?	0	100	7	93	3	97	0	100	9	91	0	100	0	100	0	100
NUMBER OF TICKETS																
7. If you answered yes to question #2, how many tickets have you received? 1	17		27		28		10		18		18		23		0	
2	7		13		14		3		27		8		0		0	
3	2		7		5		0		9		2		0		0	
4 or more	0		6		3		0		9		0		0		0	

Table I shows the eighteen year olds to have a his/her percentage of violations, accidents, suspensions and incidences of drinking and driving than the seventeen year olds. Fifty-three percent of eighteen year olds had been stopped by the police for a traffic violation, compared to 30 percent of the seventeen year olds. Fifty-three percent of the eighteen year olds had received a ticket compared to twenty-five percent for the seventeen year olds. Comparing the incidences of drinking and driving showed 67 percent of the eighteen year olds had driven after drinking to 58 percent for the seventeen year olds. None of the seventeen year olds and 7 percent of the eighteen year olds had their license suspended or revoked.

Findings also showed male students to have a higher percentage of violations, accidents, suspensions and incidences of drinking and driving than females. Fifty-eight percent of the males had been stopped by the police compared to 13 percent of the females. Seventy-two percent of the males had driven a car after drinking compared to 47 percent of the females. Three percent of the males, and no females had their license suspended or revoked. Thirty-six percent of the males were involved in a car accident of which 17 percent admitted being at fault. Twenty-eight percent of the females had been involved in accidents. And ten percent of the females admitted to being at fault in their accidents.

Table I depicts the relationship between grades received in behind-the-wheel training and traffic violations.

Sixty-four percent of the A students had been stopped by the police compared to 28 percent for the B students, 36 percent for the C students and zero percent for the D students. A students had a higher percentage of

traffic tickets. Sixty-four percent of the A students had received a ticket compared to 28 percent for the B students, 23 percent of the C students and zero percent for the D students. Sixty-four percent of the A students had driven after drinking whereas 59 percent of the B students, 59 percent of the C students and 50 percent of the D students had driven after drinking. The only suspension or revocation took place in the A group, with 9 percent of the A students losing their license.

CONCLUSIONS

The results of this study showed eighteen year old male students and A students to have the most freedom in the use of an automobile. The same group had the greatest number of traffic violations, accidents, suspensions and incidences of drinking and driving. The data indicated a correlation between driving experience potential for and actual traffic violations. The higher percentages of violations and accidents for the eighteen year old students seems to relate directly to the greater freedom in the use of the automobile as compared to the seventeen year olds. Since the eighteen year olds are driving more, there is a greater liklihood to commit traffic violations and to be involved in automobile accidents.

Since the eighteen year olds were drinking and driving with greater frequency, they were more prone to traffic violations and accidents. It also indicates they have greater access to and interest in alcohol than seventeen year olds. Although male and female senior students had about the same amount of access to an automobile, males had more violations and accidents. These higher percentage of violations and accidents among the males can probably be attributed, in part, to their tendency to drive after drinking with greater frequency than the females. Also, male teenagers are more prone to reckless and chance taking driving. Females appear to be

more conservative in their driving habits.

Another reason for the males having higher violations and accidents could be related to the time of day and week they drive. Friday and Saturday nights are the most dangerous as far as accidents are concerned. When dating, males are more likely to be doing the driving than females, and they may have a greater tendency to show off than females.

The A students had more freedom in the use of the automobile than the B, C, or D students. Their combined driving records, violations and accidents were worse than the B, C, or D students' driving records. Does this mean that the A students do not deserve their A grades, or that they are poorer drivers than those students who received the lower grade?

The reason that the A students' poor driving record probably be traced to the freedom in the use of the car. Their parents probably practiced more with them, thereby making them better drivers and deserving the A grade. Then, instilled with confidence in their students' driving ability as a result of the time spent practicing, with them combined with A driving grade, parents were more likely to allow the student to own or have unlimited use of a car. On the other hand, students receiving a poor grade probably had had very little driving practice which would account for the restricted use of a car.

Driving after drinking occurred most frequentiy among the A students. This would seem to be logical since the A students are doing more driving and thereby would have great opportunity to drive after drinking. Also greater mobility would give them greater access to alcohol. Parents probably perceived the 18 year A students as being more mature; hence, they were given more freedom.

The findings suggest the behind-the-wheel grades do not protend a good driving record. A grade of A or B means the student has mastered the mechanical skills of driving a car at a fairly high level of proficiency. It also indicates that he/she has had or has experience driving and perhaps knows the "rules of the roads." It may also indicate that many A or B students had been practicing driving illegally with their parents, relatives or a friend before obtaining a driving permit. They also practiced once they received the permit. Therefore, their attitudes toward driving safety and the inherent responsibilities may have been performed prior to taking the driving course. And the driving teachers instructions may have seemed unimportant and irrelevant to the already "sophisticated" - experienced teenage driver.

Bell (1982) stated the most profound of all safety problems involving teenagers is:

> ...impatience: the frustration of being caught behind a slow moving vehicle... anger at being cut off by another driver...the desperate need to be somewhere immediately (p. 84).

The risks of drinking-and-driving, speeding and recklessness are thoroughly covered in driver education courses. However, Bell (1982) suggests that teenager driver behavior could be improved by having a paramedic at the local fire department rescue squad demonstrate the tools of his trade. His demonstrate would include a vivid description (actual photographs and film) of the accident--broken glass everywhere, overturned seats and cars, twisted metal and the condition of the passengers. It will leave "an image that will stick indelibly in your youngsters mind"(p.87).

Although there appears to be no positive correlation between B-T-W grades and driving performance, it could also be rationalized that if there was no driver training for teenagers in the high schools their driving record would be worse. One solution would be to issue young and new drivers a probationary license. Serious violations such as reckless driving, repeated violations and accidents and drunken driving would mean an immediate long term suspension or revocation of the probationary license. Legislatures should legislate stricter drunk driving laws. The wearing of seat belts could be enforced as it is in Germany. The insurance companies will not pay damages in the case of an automobile accident if you are not wearing a safety belt. Tougher driving laws (especially drunk driving) should be adopted with compensatory liability responsibility that includes parents as well as students.

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